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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,367	11/14/2003	Gary J. Craw	18695-9318-00	1861
23409	7590	04/04/2006	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP			HAN, JASON	
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MILWAUKEE, WI 53202			PAPER NUMBER	
			2875	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/714,367	<b>Applicant(s)</b> CRAW ET AL.	
	<b>Examiner</b> Jason M. Han	<b>Art Unit</b> 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-14,16-29,31,32 and 34-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-14,16-29,31,32 and 34-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 3, 2006 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to Claims 1, 3-14, 16-29, 31-32, 34-47 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

3. Claims 27, 43, and 46 are objected to because of the following informalities: Applicant should elucidate between the main housing and the lamp housing apertures within the claim. At present, the Examiner has assumed the Applicant is referring to the lamp housing apertures in the rejection below. Appropriate correction is required.

4. Claims 44 and 47 are objected to because of the following informalities: Applicant recites, "The method as claimed in", which should read as "The apparatus as claimed in". Appropriate correction is required. It should further be noted that Claim 47, if appropriately corrected, would be a substantial duplicate of Claim 45.

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The following claims have been construed in light of the specification, but rendered the broadest interpretation as stated by the Applicant [MPEP 2111].

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3, 5-10, 42, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Roethel (U.S. Patent 1722825).

6. With regards to Claim 1, Roethel discloses a combination lighting and ventilating apparatus including:

- A main housing [Figures 1, 6: (12)] having a first aperture [Figures 1, 6: proximate (15)], wherein the aperture defines a ventilation inlet and a lighting outlet;
- A lamp housing [Figures 1, 6: (5, 29-39)] substantially recessed within the main housing, wherein the lamp housing has first [Figure 1: (31, 45)] and second [Figures 1, 6: proximate (35)] apertures spaced a distance from one another, as well as a portion extending outside of the main housing;
- A lamp [Figure 1: (40, 41)] recessed within the lamp housing and the main housing;

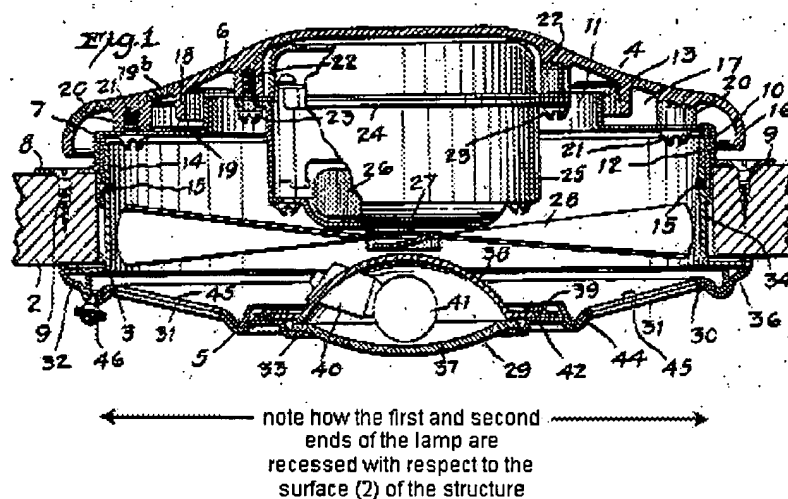
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- A fan [Figures 1, 6: (28)] positioned to draw air from an area to be ventilated into and through the first aperture of the lamp housing, around the lamp, and through the second aperture of the lamp housing, whereby the second aperture is positioned to directed air away from the area to be ventilated; and
- A flange [Figure 1: (32 or 36)] substantially continuously coupled to the portion of the lamp housing extending outside of the main housing, whereby

the flange substantially continuously engages a surface of a structure



7. With regards to Claim 3, Roethel discloses the lamp housing [Figure 1: (34)] having a circular cross-section, and the flange [Figure 1: (32 or 36)] being annular in shape.
8. With regards to Claim 5, Roethel discloses the lamp housing having at least one outwardly-bowed wall [Figure 1: (37 or 38)] presenting a concave wall shape to the lamp in the lamp housing.
9. With regards to Claim 6, Roethel discloses the fan [Figure 1: (28)] being located outside of the main housing [Figure 1: (12)].
10. With regards to Claim 7, Roethel discloses the lamp housing [Figure 1: (34)] dimensioned to be received within the first aperture [Figures 1, 6: proximate (15)] of the main housing.
11. With regards to Claim 8, Roethel discloses the lamp [Figure 1: (40, 41)] having a first end and a second end, whereby the first and second ends of the lamp both are recessed with respect to the surface of the structure [see drawing below].



12. With regards to Claim 9, Roethel discloses a motor [Figure 1; (25-26)] drivably coupled to the fan, whereby the motor is located within the main housing.

13. With regards to Claim 10, Roethel discloses the lamp [Figure 1: (40-41)] having an external surface, whereby the lamp housing [Figure 1: (5, 29-39)] and the external surface of the lamp define an air passageway through which air passes from the first aperture of the lamp housing to the second aperture of the lamp housing and into the main housing.

14. With regards to Claim 42, Roethel discloses the lamp housing [Figures 1, 6: (5, 29-39)], the flange [Figure 1: (32 or 36)], and the surface of the structure [Figures 1, 6: (2)] concealing the main housing [Figures 1, 6: (12)].

15. With regards to Claim 44, Roethel discloses positioning the flange [Figure 1: (32 or 36)] and the lamp housing [Figures 1, 6: (5, 29-39)] with respect to the surface of the structure [Figures 1, 6: (2)] to conceal the main housing [Figures 1, 6: (12)].

16. Claims 11-14, 16-19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Aikens (U.S. Patent 4142227).

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17. With regards to Claim 11, Aiken discloses a lighting and ventilating apparatus providing:

- A lamp housing [Figures 1-2: (100)] substantially recessed within a first aperture of a main housing [Figures 1-2: (12)] such as to define a recessed lamp housing portion and a protruding lamp housing portion positioned outside said main housing, wherein the recessed lamp housing portion is substantially larger than the protruding lamp housing portion [Figure 2];
- A lamp [Figures 1-2: (56)] positioned within the lamp housing and main housing to define a recessed lamp, whereby the recessed lamp has an exterior surface exposed to air moved by the apparatus;
- Illumination of a room with the lamp [Figure 4; Column 1, Lines 24-26];
- A fan [Figure 2: (162)] driven to draw air from the room into the recessed lamp housing and around the exterior surface of the recessed lamp [Column 1, Lines 50-56];
- The air drawn around the lamp into the main housing [Figure 2]; and
- Ventilation of the air from the main housing to a position outside of the room [Figure 2: (162); Column 6, Lines 45-56].

18. With regards to Claim 12, Aiken discloses that the driving of the fan is performed independently of illuminating the room [Column 1, Line 23].

19. With regards to Claim 13, Aiken discloses mounting the apparatus to a mounting surface [Figures 1-2: (10)], wherein the main housing is recessed with respect to the mounting surface.

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20. With regards to Claim 14, Aiken discloses the lamp [Figure 2: (56)] having a first end and a second end, whereby the lamp is positioned within the lamp housing [Figures 1-2: (100)] such that the first and second ends of the lamp are recessed with respect to the mounting surface [Figure 2: (10)].

21. With regards to Claim 16, Aiken discloses the air being drawn around the lamp into the main housing via the first aperture of the main housing [Figures 1-2: (28)].

22. With regards to Claim 17, Aiken discloses the lamp housing having a first aperture [Figures 1-2: proximate (144)] and a second aperture [Figures 1-2: proximate (132)], whereby the fan draws air from the room through the first aperture of the lamp housing, around the exterior surface of the lamp, and into and through the second aperture of the lamp housing [Figure 2].

23. With regards to Claim 18, Aiken discloses driving the fan to draw air past walls of the lamp housing having a concave cross-sectional shape taken along an axis of revolution of the lamp housing [Figures 1-2: (100)].

24. With regards to Claim 19, Aiken discloses the lamp housing being substantially recessed within the main housing via coupling the lamp housing to the main housing with a spring [Figures 1-2: (109); Column 4, Lines 37-52].

25. With regards to Claim 21, Aiken discloses driving the fan [Figure 2: (162)] being located outside the main housing [Column 6, Lines 52-55].

26. Claims 22-28, 31, 45, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Roethel (U.S. Patent 1722825).



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27. With regards to Claim 22, Roethel discloses a combination lighting and ventilating apparatus including:

- A main housing [Figures 1, 6: (12)] recessed with respect to a mounting surface [Figures 1, 6: (2)] and having a first aperture [Figures 1, 6: proximate (15)], wherein the first aperture defines a ventilation inlet through which air is drawn into the main housing and a lighting outlet;
- A lamp housing [Figures 1, 6: (5, 29-39)] substantially recessed within the main housing, wherein the lamp housing has a portion extending outside of the main housing;
- A lamp [Figure 1: (40, 41)] recessed within the lamp housing and with respect to the mounting surface;
- A fan [Figures 1, 6: (28)] positioned to draw air from an area to be ventilated into the lamp housing, around the lamp, and through the main housing to a position outside the area to be ventilated; and
- A flange [Figure 1: (32 or 36)] substantially continuously engaging the mounting surface and substantially continuously coupled to the portion of the lamp housing extending beyond the first aperture of the main housing.

28. With regards to Claim 23, Roethel discloses the lamp [Figure 1: (40, 41)] being recessed within the lamp housing [Figures 1, 6: (5, 29-39)] and the main housing [Figures 1,6: (12)].

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29. With regards to Claim 24, Roethel discloses the lamp having an exterior surface [Figure 1: part of (40)] in fluid communication with air drawn into the lamp housing by the fan.

30. With regards to Claim 25, Roethel discloses a motor [Figure 1: (25, 26)] being positioned within the main housing and drivably coupled [Figure 1: (27)] to the fan.

31. With regards to Claim 26, Roethel discloses the lamp housing having a first aperture [Figure 1: (31, 45)] and a second aperture [Figures 1, 6: proximate (35)] opposite the first aperture.

32. With regards to Claim 27, Roethel discloses the first and second apertures of the lamp housing being axially aligned, whereby the first aperture [Figure 1: (31, 45)] of the lamp housing is smaller than the second aperture [Figures 1, 6: proximate (35)] of the lamp housing; and the lamp and the lamp housing define an air passageway therebetween, whereby the air passageway extends between the first and second apertures of the lamp housing.

33. With regards to Claim 28, Roethel discloses the fan [Figure 1: (28)] being positioned to draw air into the first aperture of the lamp housing, around the lamp, and into the second aperture of the lamp housing.

34. With regards to Claim 31, Roethel discloses the lamp housing [Figure 1: (34)] having a circular cross-sectional shape, and the flange [Figure 1: (32 or 36)] being an annular flange.

35. With regard to Claims 45 and 47, Roethel discloses the lamp housing [Figures 1, 6: (5, 29-39)], the flange [Figure 1: (32 or 36)], and the surface of the structure [Figures 1, 6: (2)] concealing the main housing [Figures 1, 6: (12)].

36. Claims 32, 34-38, and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Aikens (U.S. Patent 4142227).

37. With regards to Claim 32, Aiken discloses a lighting and ventilating apparatus providing:

- An illuminating and venting apparatus [Figures 1-2] recessed within a mounting surface [Figures 1-2: (160)], whereby said apparatus includes a main housing [Figures 1-2: (12)] including a first aperture [Figures 1-2: (28)], a lamp housing [Figures 1-2: (100)], a lamp [Figures 1-2: (56)] having first and second ends, and a fan [Figure 2: (162); Column 1, Lines 50-56];
- The lamp housing substantially recessed within the main housing and through the first aperture so as to define a recessed lamp housing portion [Figures 1-2: proximate (108)] and a protruding lamp housing portion [Figures 1-2: (140)] positioned outside the main housing, wherein the recessed portion is substantially larger than the protruding lamp housing portion;
- The lamp [Figures 1-2: (56)] positioned within the lamp housing such that the first and second ends of the lamp are recessed within the mounting surface [Figures 1-2: (160)];
- Illumination of a room with the lamp [Figure 4; Column 1, Lines 24-26]; and

- Driving the fan [Figure 2: (162)] to move air into the lamp housing, around the lamp, and into the main housing [Figure 2; Column 1, Lines 50-56].

38. With regards to Claim 34, Aiken discloses moving air into a bowl-shaped structure defined by walls of the lamp housing [Figure 2: (108)].

39. With regards to Claim 35, Aiken discloses positioning a flange [Figure 2: (10, 14)] adjacent the mounting surface, whereby the flange [Figure 2: (14)] is engaged with the portion of the lamp housing that extends outside of the main housing.

40. With regards to Claim 36, Aiken discloses positioning the lamp [Figures 1-2: (56)] within the lamp housing [Figures 1-2: (100)] and the main housing [Figures 1-2: (12)].

41. With regards to Claim 37, Aiken discloses the lamp [Figures 1-2: (56)] having an exterior surface, wherein the lamp is positioned within the lamp housing [Figures 1-2: (100)] such that the lamp exterior surface is in fluid communication with air drawn into the lamp housing [Figure 2].

42. With regards to Claim 38, Aiken discloses the first aperture of the main housing [Figures 1-2; (28)] being adjacent the portion of the lamp housing that extends outside of the main housing [Figures 1-2: (100)], whereby ventilation of the room is through the main housing first aperture.

43. With regards to Claim 40, Aiken discloses driving the fan [Figure 2: (162)] being located outside the main housing [Column 6, Lines 52-55].

44. With regards to Claim 41, Aiken discloses the lamp housing having a first aperture [Figures 1-2: proximate (144)] and a second aperture [Figures 1-2: proximate (132)], whereby the fan draws air from the room through the first aperture of the lamp

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housing, around the exterior surface of the lamp, and into and through the second aperture of the lamp housing [Figure 2].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

45. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roethel (U.S. Patent 1722825) as applied to Claim 1 above, and further in view of Rippel et al. (U.S. Patent 6632006).

Roethel discloses the claimed invention as cited above, but does not specifically teach the lamp housing including a light baffle.

Rippel teaches, "The finishing section, installed after construction of the ceiling is completed, contains the optics of the fixture, including any reflectors, baffles, or lenses" [Column 1, Lines 60-63].

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lighting and ventilation apparatus of Roethel to incorporate the baffle of Rippel to provide the commonly known benefit of regulating the flow of light from the lamp to a desired preference.

46. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aikens (U.S. Patent 4142227).

Aiken discloses the claimed invention as cited above, but does not specifically teach driving the fan including a motor located within the main housing to drive the fan.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a motor inside the main housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70. In this case, it is obvious that placing the fan/motor inside the main housing would alter the fluid dynamics [e.g., air] of the system to a desire preference. It is also obvious that rearranging the fan/motor inside may allow for easier manufacturing, installation, or removal of the apparatus with all the components within a single, monolithic (main) housing.

47. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roethel (U.S. Patent 1722825).

Roethel discloses the claimed invention as cited above, but does not specifically teach the lamp housing having a generally frusto-conical shape with outwardly-bulging walls.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the lamp housing into a generally frusto-conical shape with outwardly-bulging walls, since it has been held to be within the general skill of a worker that mere change of form or shape of an invention involves only routine skill in the art. *Span-Deck Inc. c. Fab-Con, Inc.* (CA 8, 1982) 215USPQ 835. In this case, it would have been obvious to modify the lamp housing to conserve space, or to produce a desired optical or convective airflow effect.

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48. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aikens (U.S. Patent 4142227).

Aiken discloses the claimed invention as cited above, but does not specifically teach driving the fan including a motor located within the main housing to drive the fan.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a motor inside the main housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70. In this case, it is obvious that placing the fan/motor inside the main housing would alter the fluid dynamics [e.g., air] of the system to a desire preference. It is also obvious that rearranging the fan/motor inside may allow for easier manufacturing, installation, or removal of the apparatus with all the components within a single, monolithic (main) housing.

49. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roethel (U.S. Patent 1722825).

Roethel discloses the claimed invention as cited above, but does not specifically teach a ratio existing between a first diameter of the first aperture and a second diameter of the second aperture, whereby the ratio is approximately between approximately 1.1 to 1 and 3 to 1.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first and second apertures to have a diametrical ratio approximately between 1.1 to 1 and 3 to 1, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the

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optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. In this case, one would want to find an optimum ratio between the diameters so as to effectively dissipate heat and convection.

50. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roethel (U.S. Patent 1722825).

Roethel discloses the claimed invention as cited above, but does not specifically teach a ratio existing between a first diameter of the first aperture and a second diameter of the second aperture, whereby the ratio is approximately between approximately 1.1 to 1 and 3 to 1.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first and second apertures to have a diametrical ratio approximately between 1.1 to 1 and 3 to 1, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. In this case, one would want to find an optimum ratio between the diameters so as to effectively dissipate heat and convection.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.



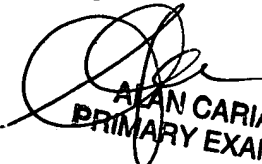
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (3/30/2006)

Jason M Han  
Examiner  
Art Unit 2875

  
ALAN CARIASO  
PRIMARY EXAMINER